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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/901,802	07/10/2001	Mei-Ling Wu	284867-00040	7917

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Robert S. Klemz
Pietragallo, Bosick & Gordon
One Oxford Centre, 38th Floor
301 Grant Street
Pittsburg, PA 15219

EXAMINER	
RESAN, STEVAN A	
ART UNIT	**PAPER NUMBER**
1773	3

DATE MAILED: 02/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/901,802	WU ET AL.	
	Examiner	Art Unit	
	Stevan A. Resan	1773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disp sition of Claims

4)☒ Claim(s) *1-38* is/are pending in the application.

4a) Of the above claim(s) *21-30* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20 and 31-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 July 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-20, drawn to an article and a nominal method, classified in class 428, subclass 694tc.

II. Claims 21-30, drawn to a method, classified in class 427, subclass 577.

2. The inventions are distinct, each from the other because:

3. Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the article may be made by another method such as depositing a protective layer and modifying the layer by ion implantation of fluorine and dopants to obtain the layer.

4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

5. During a telephone conversation with Alan Towner on 2-12-2003 a provisional election was made with traverse to prosecute the invention of I, claims 1-20, 31-38. Affirmation of this election must be made by applicant in replying to this Office action. Claims 21-30 have been withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

7. Claims 31-33 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Bray et al US 6,468,642.

8. Claims 1, 2, 8-13, 15-16, 18-20, 31-34, 36-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Schmidt et al US 5,266,409.

See Fig 11, Col 1 line 42-45; Col 1 line 61-Col 2 line 65; Col 5 lines 16-37; Tables 1, 2, ; Col 9 lines 4-28; Col 15 line 56-Col 16 line 26.

The dopant disclosed is deemed a thermally stabilizing dopant since it is the same dopant as used by applicants.It has been held that where claimed and prior art products are identical or substantially identical in structure or in composition, or are produced by identical or substantially identical processes a case of anticipation or a prima facie case of obviousness has been established and the burden of proof is shifted to applicant to show that prior art products do not necessarily or inherently possess the charactistic of a claimed product whether the rejection is based upon"inherency" under 35 USC 102 or on "prima facie obviousness" under 35 USC 103 jointly or alternately.

In re Best 562 F2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977); In re Ludke, 58 CCPA 1159,441 F 2d at 212-13, 169 USPQ 563 (1971); In re Brown, 59 CCPA 1036, 459 F. 2d 531, 173 USPQ 685 (1972).

" When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not". In re Spada. 911 F2d 705, 709, 15 USPQ 2d 1655 (Fed. Cir. 1990).

The terms "thermally assisted" and "optically assisted" in claims 19 and 20 are not deemed to impart structure to the article but are considered merely an intended use (which, however, also appears to be encompassed by the disclosure of Schmidt).

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 14, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt et al as applied above and discussed below.

While Schmidt et al does not disclose a buffer layer as in claim 14. However Schmidt teaches that multiple layers may be present each of which may be regulated to control desired properties.

Schmidt does not disclose the use of a soft magnetic layer beneath the hard magnetic layer as in claim 17. However the use of soft magnetic underlayers was old in the art at the time of the invention for regulating exchange coupling.

Therefore it would have been obvious to one of ordinary skill in the art to vary these results effective variables in order to optimize properties.

11. Claims 3-6, 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt et al as applied to claim 1 above in view of Endo et al Appl Physics letters. Schmidt does not teach the additional use of nitrogen or a nitrogen compound as a dopant in the layer. However Endo teach that Nitrogen enhances the thermal stability of a fluorinated carbon layer.Therefore it would have been obvious to one of ordinary skill in the art to add nitrogen in order to enhance thermal stability.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stevan A. Resan whose telephone number is (703) 308-4287. The examiner can normally be reached on Tues-Fri from 7:30AM to 6:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau, can be reached on (703) *308-2367. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-7718

STEVAN A. RESAN
PRIMARY EXAMINER